



The New Financial Architecture: A Threat to the Markets?

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The official sector is blaming hysterical markets for the crisis

But it was the IFIs that failed in their surveillance

Changes proposed for the New Architecture reflect official finger pointing at the private sector

"Burden sharing" and "bailing in" are misguided in the short-term

I. Introduction

An official/academic intellectual axis has now congealed to lay the blame for the recent financial crisis squarely on gross imperfections in markets rather than on fundamental economic problems. In this view, small fundamental problems and financial system insolvencies were blown into debilitating systemic regional problems by herding behavior when foreign financial institutions pushed excessive capital flows into emerging markets and by hysterical panic when they then pulled out in excessive amounts. This psychological contagion pushed the emerging markets from a good equilibrium to a self-fulfilling bad one. There may have been some bad policy and bad investment around the margins or even deeply rotten domestic financial sectors, but the punishment was far out of proportion to the crime. The crisis was a major disturbance that emanated from the financial markets themselves.

In contrast, it is our view that the key shortcoming of the global financial architecture is not the irrational or free-riding behavior of foreign investors. Instead, the last three emerging market crises could have been mitigated if the IFIs - in particular the IMF - had lived up to their surveillance mandate, and if these institutions had been given sufficient powers to force the timely implementation of remedial action on the part of member countries.

However, the official doctrine of causality, relying as it does on irrational foreign investors - or rational ones pumping out a bad equilibrium - is now being reflected in the multitude of proposals for a New Architecture for domestic and international financial markets that are being strongly pushed in the intellectual and political centers. The agenda is to reduce the chances that future crisis will emanate from the financial sector by making the financial sector more "responsible". The changes that may ultimately be implemented under the new architecture will most likely be cosmetic and irrelevant, such as proposed changes in data availability and openness both in borrower countries and IFIs. Others will be obviously ineffective, such as efforts artificially to lengthen the maturity structure of external debt, to change the character of capital inflows, or to lock in marginal credit lines from the private sector.

Some proposals - aimed at ending finally the moral hazard free ride that official policies have created - are dangerous and misguided in the short term, however. First, the idea of "burden sharing" or "bailing in" is becoming dominant. Under certain outcomes-to-be determined by an outside agency like the IMF or the BIS - the terms of debt claims against sovereign borrowers can be altered in substantive ways, such as lengthening maturity, changing the coupon, or even forcing the bondholder into increasing exposure. This means at its core a forced restructuring of foreign claims - either gently through "moral suasion" or more punitively. To start the ball rolling, the idea has been shopped around through the Paris Club's push to restructure sovereign eurobonds in concert with a restructuring of its own claims, at least in the case of Pakistan; and the IMF is thought to have quietly pressed the Russians to restructure their outstanding eurobond obligations. The

effect of such an action will be to trigger a general reassessment and repricing of sovereign emerging markets credits, combined with a further shrinking of external resources available to emerging market countries. This effort is receding for the moment in the face of issuer resistance against walking into this propeller for the sake of establishing the principle. Also, it is increasingly recognized that this is not the time to reawaken the financial crisis.

***The New Architecture will
reduce market liquidity***

Second, the imposition of capital controls now has been given the status of a potentially desirable policy. These may take the form of taxes or restrictions on short-term inflows rather than the still anathema controls on outflows. Third, hedge fund operations are under attack, with demands for "transparency" and restrictions. There will be a review of VAR and netting methods and a reconsideration of risk capital allocations. All this will reduce the liquidity of the markets that are given this treatment, possibly force countries dependent on these markets back onto the loan book, or close them out completely.

***Few proposals are politically
viable***

Few of the more serious proposals are politically viable. The would-be beneficiaries of the bailing-in, burden sharing, and contingent credit line proposals are noteworthy in the speed that they are distancing themselves from them. They recognize in particular the risks of the withdrawal or increased costs of credit under an explicit burden-sharing regime. The likely underfunded and ill-defined IMF contingent credit facility is viewed now as potentially more a curse than a blessing by potential recipient countries. On the creditor side, even the simpler proposals such as hedge fund disclosure are unlikely to pass political muster.

In these pages, we document the existence of this intellectual convergence of academic and official views.¹ We begin with an introductory glossary and discussion of nasty words that have become a *sine qua non* in academic/official descriptions of financial market behavior. These words are the rhetorical weapons behind the New Architecture. They define the core of the official vision of the causes of the crisis, though they represent fuzzy concepts that are inherently unverifiable. Next, we document the use of these words in forming the dominant academic/official view. Finally, and most importantly, we consider the meaning of the new architecture for the financial markets, institutions, and would-be multilateral supervisory and surveillance bodies and suggest institutional changes in the IMF that would give it a more constructive role in a globalized financial system.

***A glossary of nasty words
defines the official view***

II. Beware these Nasty Words

In the now-dominant academic/official discourse, the crises of the 1990s have come to be viewed as self-generating surges of optimism by foreign lenders in combination with weakly controlled domestic financial sectors that have pumped up asset prices and misallocated investments and resources in such a massive way that a crash and financial and economic distress must have followed. Alternatively, they were outbursts of pessimism that collapsed otherwise sound markets and generated bad equilibria. Yet again, a perhaps inevitable collapse was

¹ This is not to say that there is a convergence in views about the proper policies to deal with these crises once started. The convergence concerns only the finger-pointing about the sources of the crises from those very observers who were caught flatfooted in mis-predicting the course of emerging market growth. Indeed, academics and official institutions now in lockstep on the causes of the crisis are at each other's throats on the crisis management policies that should have been followed. There are important dissenters in each camp to the academic and official views outlined here. However, these views do form the basis of the New Architecture.

made far worse by lenders' panic.

Analyses of the events especially of the crisis years of 1997, 1998, and 1999 are now always painted by media, academics, and policymakers with at least one from a list of nasty words:

- Panic
- Bank Run Equilibrium
- Herding
- Excessive Volatility
- Self-Generating (Multiple) Equilibria
- Bubble
- Contagion

We first consider whether these words are meaningful or verifiable.

Bank run models are purely driven by liquidity problems

1. Panic and Bank Run Equilibrium

We hear the word "panic" from numerous academics and ex-academics in the official sector in their explanations of the crises in South East Asia of 1997-98, particularly for Indonesia and also for Mexico in 1994-95. The collapse was driven by a market panic that stems from what academics call a *Diamond-Dybvig bank run equilibrium*. The Diamond-Dybvig (1983) bank run model is purely a story of liquidity problems in a bank or a banking system—not a story of fundamental insolvency in the system. In that model, banks collapse because of some sudden surge of emotion among depositors, who think that they should get their money out before all the other depositors withdraw theirs. Because banks operate with a mismatch between liability and asset maturities, the attempt to get all the money out at once is of course fruitless. The bank has to sell all its assets at fire-sale prices; therefore, the bank run itself causes the insolvency and depositors are justified in having tried to get out their money. Given that everyone thinks that everyone else will withdraw their funds, each individual should immediately withdraw his funds. If only the depositors had stayed calm, the assets would have paid off thereby justifying the depositors' faith in the bank. The equilibrium outcome for the bank—good or bad—then depends entirely on the passions of its creditors. This is the most successful model of a banking crisis in the economics literature.

Theoretically elegant, they are devoid of empirical relevance

This view of bank runs is a tribute to the dominance in academic economics of modeling elegance over empirical content, and this attitude has carried over to the IFIs through their academic orientation. If we take the historical ratio of banks that became *insolvent because they had been run* to banks that *were run because they had become insolvent*, we will find that the number is zero. First comes the insolvency, then comes the run, probably long after it was justified by the insolvency. Solvent banks generally are not run, and if they are, they tend not to go bankrupt. Yet, every time we face a banking crisis, the Diamond-Dybvig model is invoked. Rarely has the disconnect between our esthetic preference for modeling elegance and our need to understand real events been so stark.

The bank run model was extended to national balance sheets

Automatically applying the concept at the country level by treating countries as banks has generated an equally unreal view. In this analogy, a country's balance sheet position *vis a vis* the rest of the world makes it a short term borrower and a holder of long term assets. If the borrowers suddenly demand payment, the country has a liquidity crisis that will be self-justifying because it causes a collapse in the value of the assets.

The liquidity view is a spin to justify unprecedented official intervention

To spin its unprecedented intervention, the official community convinced itself that the 1994-95 Mexico crisis was a bank run/liquidity crisis triggered by panicked foreign investors early on in the crisis. Though we now know that the crisis resulted from actions taken by domestic insiders who were well-informed about Mexico's precarious condition, this vision has stuck and now been magnified and replicated throughout the crises of 1997 and 1998.

Investors are cattle

2. Herding

Herding is a vague word, projecting the feeling that speculators are cattle, some kind of prey and not predators. The rigged image here is that investors somehow go grazing passively from one place to another following a leader without scouting out the grass themselves. In particular, the herding concept is invoked in the context of large amounts of funds flowing into emerging markets.

Who let others do their thinking

There is nothing inherently wrong with the concept. Herding is not an irrational act. If it is known that someone is good at analysis and that person makes a move, it is reasonable to follow. The problem is that those who invoke herding as an explanation for the movement of funds by a large number of institutions into a particular market never provide any evidence on what basis decisions are being made. That we see large amount of funds flowing into a country together at one time and flowing out together at another time does not mean that herding is going on-i.e. that one or two smart people are doing the analysis or manipulating the market and that everyone is following blindly. Everyone may be doing analysis. Alternatively, fund managers may delegate the serious research and analytical effort to a trusted research organization. That organization may have many customers. That the individual fund manager does not have a research department does not mean he is acting blindly.

When the future is a fog, we grasp the most convincing superstar's theory to guide us - the official sector included

The future is always shrouded in fog: we never know what is coming and yet we have to allocate investment resources according to our best guess of the future. To fill the gap, we have theories. Once in a while, a convincing theory emerges that allows us to visualize the future "better" than before. That is what economic research is about: to generate concepts that we can use to interpret observed phenomena and perhaps to forecast phenomena. Every once in a while, a theory becomes dominant and perhaps convincing. Keynesianism was a convincing theory once, and governments *herded* on the basis of Keynesian policy prescriptions. These tended to fail in their more overblown form, after which governments shied away from such policies and imposed (*herded* around) stringent anti-inflationist policies. No one says, though, that we had herding behavior on the part of governments during the 1960s and 1970s when they bought into Keynesianism and during the 1980s and 1990s when they got out en masse. Or that the official sector is now *herding* around the *herding* theory of markets by jumping on-board a view for which they, themselves, have developed no serious evidence.

When private markets adopt a convincing theory-e.g. when investors entered South East Asia on the basis for example of greater discipline implied by 'Asian values' theories and then pulled out when the contrary evidence piled up or when they came to believe in a sudden addition of liquidity in asset markets because of the VAR risk management theory hawked by the best finance researchers-that has been called *herding*. Herding is then a charged word that implies there is something quite wrong with market behavior.



The official sector and academics knew better how much is too much volatility

Multiple equilibria are at the heart of the New Architecture...

...because we need the well informed official sector to guide us to the good outcome...

...whereas the mass hysteria of the private sector produces the bad one

But whose view of the world is most likely to lag behind reality?

A beautiful word of infinite fuzziness,

3. Excess Volatility

This word pair indicates "too much" volatility, but compared to what? Whoever uses this concept must have some notion of the right level of volatility. That is, he must possess a theory of what the proper level of asset price volatility is. Somehow he has determined that the markets have gotten it wrong-not that his theory may be wrong and that it is time to seek a replacement for an obsolete view.

4. Multiple Equilibria (Self-Generating or Self-Fulfilling)

The key concept in current discussions about what went wrong in recent years is the notion of *self-generating multiple equilibria* in asset markets. In speculative attack models on currencies, they are known as the Generation 2 models. But they also are invoked as a necessary component in the still non-existent world of the Generation 3 crisis models, which, if they ever bear fruit will revolve around balance sheet problems in financial institutions and corporates.

In pricing assets, we can have a good equilibrium or a bad equilibrium outcome. In the good equilibrium, assets will generate sufficient payouts to justify their high prices and economic activity will be high-as long as everyone is willing to hold the assets. In the bad equilibrium, nobody wants to hold the assets, which leads to low prices, low payouts on the assets, and low levels of economic activity. To get from hell to heaven it is only necessary that speculators should wake up one morning, thinking that although they are in hell right now, if only they can imagine themselves to be in heaven as a group and act on the thought, they will be in heaven. One's presence in heaven or hell then is blamed on the psychology of the speculators.

Psychological state of mind is not a measurable concept. We cannot put a ruler on it. It does, however, provide a convenient way of explaining some phenomena in the market that cannot be otherwise explained. Our favorite models of fundamentals often cannot explain important observed shifts in asset market values. We all know that market psychology or *market sentiment* can be important at least in short term asset pricing, so we blame the inadequacy of our fundamental model *vis a vis* actual outcomes on the unmeasurable market psychology.

But is it that we simply wake up feeling bad or that we are adjusting our views about the theoretical models upon which forecasts are based? The blurring sequence of new crisis models that has been thrown up by the academic community with each step in the crisis indicates that there can be adjustment in this dimension. When the market's internal model of economic and financial dynamics differs from the lagging academic and official model and produces an anomaly relative to the academic model, academics call this "self-fulfilling multiple equilibria" generated by market psychology. When an academic model finally catches up to this view of reality and explains it, academics call this a *seminal model* of the fundamental driving forces and cite it endlessly.

5. Bubbles

The classic word for all these phenomena is *bubble*. *Bubble* is one of the beautiful concepts in economics and finance in that it has no fixed meaning. It is like *liquidity*, a fuzzy word filled with import but lacking a solid definition. The definition for *bubble* most often used in economic research is that part of asset price movement that is unexplainable based on what we call fundamentals. Fundamentals are a collection of variables that we believe should drive asset prices *and* the theory that weaves these variables together into a forecast. In the context of a particular model of fundamentals, if we have a serious misforecast of asset prices we might say that there is a bubble.

*giving a name to the
unexplainable,*

*allows academics to
perpetuate their bankrupt
models*

*They don't understand the
real meaning of globalization,
so they call it contagion*

A summary of views

*Balance sheet problems were
caused by self-fulfilling
outflows*

This is no more than saying that there is something happening that we cannot explain. In studies of other markets, we give it another name-random disturbance. But, if, for example, we are doing household behavioral studies, we do not then curse the misbehavior of the household for causing this model failure. We tend to blame themselves and try to reorganize the model.

Financial market and exchange rate work undertaken by international macroeconomists is unique in that we give names to our random disturbances - *bubbles, herding, contagion, self-validating multiple equilibria* - all of them pejorative, yet devoid of observable or verifiable content. This is preferable to questioning the value of our analytical framework.

The invocation of the bubble or self-fulfilling equilibrium story of asset price collapse is the easy and empty way out of a deviation of asset prices from one's internal model of fundamentals. It is empty because it makes our theories of asset prices tautological. It relies as the primary explanation of events on expectations and behaviors on the part of traders that we cannot observe.

6. Contagion

The final nasty word is *contagion*, which has to do with the interconnection of financial crises across markets or countries. Contagion is understandable if there are trade or direct financial connections. If there are no obvious connections, it is not so understandable. When the word is used by academics and officials, it is tinged with implications of market irrationality. Somehow there is an insidious infection across markets. The word was first used in Friedman and Schwartz's Monetary History of the United States, where they refer to the US banking panics of the early 1930s as *contagions of fear*. When used in this context, it refers to the psychology of depositors, effectively behavior that triggered what we have now renamed the Diamond-Dybvig bank run equilibria. Now that this word has been transported to the discussion of more recent phenomena, it carries with it the same charged notion of psychological pathology as *contagion of fear*. It conveys a visceral sense that markets are out of control: a large, exogenous disturbance emanates from the financial system and works itself into the real economy, rather than the financial system just being a messenger that reports disturbances coming from the real economy and policy authorities.

III. The Academic/Official Axis

We will briefly summarize the views of some officials and academics on the sources of the crisis and prescriptions for changes in the financial system. Of course, there is disagreement among academics and officials about the causes of the crisis and what is to be done about them. The New Architecture proposals, however, stem from a particular convergence of views of some key academics and officials. We have added italics to emphasize the predominance of the nasty words in the thinking behind the New Architecture, and put some comments of our own in parentheses.

1. Some Official Views

- Joseph Stiglitz, Chief Economist of the World Bank, argues that the negative swing in opinion on the Asian development *model went further than was justified by fundamentals*. He argues that a build-up of short term debt made the economies vulnerable to a *crisis of confidence*. As a result, capital outflow, and with it depreciating currencies and falling asset prices, exacerbated the strains on private



sector balance sheets and thus proved *self-fulfilling*. "Restoring growth in East Asia requires restoring confidence. This is *as much a matter of perception as of reality*, including the perception of the fundamental strengths of the East Asian economies and their resolve to address their weaknesses." (Joseph Stiglitz, "Bad Private Sector Decisions" *Wall Street Journal*, February 4, 1998.)

- Stanley Fischer, First Deputy Managing Director of the IMF, argues that contagion raises troubling questions about financial markets. "Technical factors contributing to *contagion* suggest that it has been *excessive*..." Investors may take *excessively* risky positions on the back of an IMF safety net. This effect was mitigated by the fact that investors in Asian countries and in Russia who bet on moral hazard play have taken very heavy losses. (Stanley Fischer, *The Economist*, October 3, 1998.)

- He further argues that:

There are multiple equilibria generated by excess volatility

- Reform is needed because capital flows are too volatile and because there is too much contagion in the system.
- It is hard to establish that there is *excess volatility* or that there is excessive contagion. "There seems to be a particular problem in establishing excess volatility and contagion if there are *multiple equilibria*, as I believe there are." Excess volatility can push countries into *bad equilibria* that ratifies the contagion.
- There is no case for controlling long-term inflows especially FDI, but there are disadvantages in short term capital inflows.
- Most investors in all the recent crises have suffered very large losses. Nonetheless, the moral hazard concern is valid, and it is one good reason to seek to bail in the private sector.
- *Contagion* may be attributable to highly leveraged positions such as those of hedge funds. It is to be determined whether and how to regulate hedge funds, but the scope of potential requirements for hedge fund should include investment banks, which act similarly.

(Stanley Fischer, "Reforming the International Monetary System", Nov. 9, 1998.)

All crises started with a shift of sentiment

- Michel Camdessus, Managing Director of the IMF, argues that "The crises in the emerging markets since the mid-1990s all started with abrupt *shifts in investor sentiment* that reversed the large inflows of private capital enjoyed by most of the countries for several years."
- On the New Architecture, the Fund asks: "How can we create conditions for the private sector to benefit more from the opportunities of the globalized markets, while being a *more efficient and responsible intermediary* for channeling financial resources to their best use?" (Michel Camdessus "Capital Flows, Crises and the Private Sector" March 1, 1999.)

The Fund sets out three principles for a New Architecture:

- "A mature partnership between banking and financial institutions and their sovereign and corporate client";
- Financial markets will be less volatile-they will have more information and better ability to assess risk
- There will be transparency in fiscal policies and a standard for data dissemination to strengthen reports on reserves

***Herding caused it - so go
back to relationship banking***

- In this context, what do mature partnerships mean? To avoid *excessively risky behavior* that has recently taken such a toll on both financial institutions and recipient countries. Surges in capital inflows have tended to end badly when bankers and portfolio managers follow each other without assessing adequately the structural weakness of the financial system of the recipient countries." "The interests of both the creditors and the recipient countries call for strengthening lending relations as much as possible."

The Fund's expectations are that changes in the Architecture would:

***Bank run equilibrium calls for
long-term lending***

- Put more emphasis on non-debt creating flows, especially direct investment - these are the most constructive of all flows
- Encourage a shift from short-term lending to longer-term. "*Most crises have developed around the 'rush for the exits' that was led by short-term creditors and the threat to liquidity that this posed.*" To guard against future stress excessive short-term borrowing should be avoided in the first place.
- Possibly encourage countries to acquire contingent credit lines from the private sector (*Helps avoid bank run equilibrium*)
- Involve an IMF pre-commitment of resources to countries in jeopardy of *contagion* from crises in other emerging markets on a contingency and conditional basis (To pre-empt *contagion of fear*)
- Perhaps use market measures to raise the cost of short term capital imports, already adopted in several countries (*Capital controls*)
- Promote sound macroeconomic policies, good corporate governance, a robust financial system, and transparent legal framework
- If a country is unable to service its debt, establish creditor councils to restructure since IMF lending into arrears makes sense only if this "triggers reasonable cooperative contributions from other creditors, including the private sector." (*Bailing in*)
- Establish appropriate provisions in newly issued eurobonds to make it easier to restructure them if a need arises and
- Allow the international community to sanction a temporary halt to payments to all creditors under clearly defined conditions (*Forced standstills under contingencies judged by the IMF*)



2. Some Academic Views

Contagion comes from irrational speculation

- Martin Feldstein argues that the process of *contagion* makes even virtuous countries vulnerable to currency crises. Contagion is generated by *irrational speculation* and shifts in *market psychology* that generate *bank-run* like currency attacks. Therefore, liquidity is the key to self-protection. Countries should accumulate substantial foreign exchange reserves and pre-arrange access to loans. (Martin Feldstein, "Self-Protection for Emerging Market Economies" January 1999.)
- Ronald McKinnon characterizes Asian currencies as recovering from their *panic-driven* nadirs, but *contagious* nervousness is appearing in other debtor countries. (Ronald McKinnon "Exchange Rate Coordination for Surmounting the East Asian Currency Crises" 1998.)

International financial markets are prone to self-fulfilling panics and multiple equilibria

- In reviewing the cause of the Asian crisis, Steven Radelet and Jeffrey Sachs argue that international financial markets are intrinsically highly unstable and are prone to *self-fulfilling crisis*, in which although individual creditors may act rationally, market outcomes produce sharp, costly and *fundamentally unnecessary panicked reversals in capital flows*. In the Asian crisis, the unwillingness of the capital market to provide fresh loans to illiquid borrowers was the source of the problem. Markets may fail in this way because of a lack of collective action, which produces the bad outcome when *multiple equilibria* are possible. Individual creditors decide not to lend because they believe no other creditor make loans. A *panic among depositors* is therefore the outcome.

They acknowledge the importance of other explanations: shifts in international market conditions, mismanagement, and corruption. But they conclude that intrinsic capital market instability is a key factor in the depth, severity, extent and simultaneity of the region's problems, especially since these countries borrowed heavily from abroad at short maturities and in foreign currency. The crisis was triggered by dramatic swings in creditors' expectations about the behavior of other creditors, creating a *self-fulfilling financial panic*.

The policy goal should be to *support long-term capital flows* (especially DFI and equity portfolio investment, with a rapid opening of the financial sector to these operations) and to limit short-term international flows to the financing of short-term trade transactions (using taxation, supervisory limits, and practical enforcement). Liberalization of short-term capital movements should be undertaken only gradually. (Steven Radelet and Jeffrey Sachs, "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects" *Brookings Papers on Economic Activity* 1:1998.)

Mexico was hit by a self-fulfilling attack

- According to Jeffrey Sachs, Aaron Tornell, and Andres Velasco, Mexico was hit by a *self-fulfilling speculative attack* in late December 1994. There were many fundamental reasons for the devaluation of the peso at that time (appreciated real exchange rate and weak banking system), but the peso depreciated much more than was inevitable. The subsequent Tequila effect reached only countries with weak fundamentals and few reserves relative to their short-term liabilities that were more vulnerable to *self-fulfilling investor panics*. As a result, the shift in expectations generated by the Mexican crisis induced a *pessimistic equilibrium in the weak economies*.

Previous misbehavior was a necessary condition for crisis (overvalued real exchange rates and recent lending booms, coupled with low reserves, relative to short-term commitments of the central bank). At the same time an important element of *self-fulfilling panic*, or *contagion*, is evident in the aftermath of the Mexican crisis. (Jeffrey Sachs, Aaron Tornell, and Andres Velasco, "Financial Crisis in Emerging Markets: The Lessons from 1995" *Brookings Papers on Economic Activity* 16, 1996.)

Last year's Krugman:
Asia was caused by risky lending, bad investments driven by moral hazard

- Last year, Paul Krugman's fundamental explanation was that the Asian currency was part of a broader financial crisis. He emphasized the role of poorly regulated financial intermediaries and the price of real assets such as land and capital.

In the Asian economies, there was a boom-bust cycle in the asset markets that preceded the currency crisis. The Asian crisis can then be understood as one caused by financial excess and subsequent financial collapse. The currency crisis phase was a symptom and not a cause of this underlying real problem.

The excessively risky lending of financial intermediaries, which were subject to moral hazard problems because of implicit government guarantees, created inflation of asset prices. The overpricing of assets was sustained by a circular process, in which the proliferation of risky lending drove up the prices of risky assets, making the financial condition of the intermediaries look sounder than it was. Then the bubble burst. Both the phenomenon of *contagion* between economies with few visible economic links and the remarkable severity of the crisis can be better explained by this circularity. Other kinds of market failure, notably *herding* behavior by investors, still might have some explanatory role, but the Asian crisis was mainly about bad banking and its consequences. (Paul Krugman, "What Happened to Asia?", Internet Paper, 1998.)

This year's model:
Self-fulfilling multiple equilibria

- For this year's explanation, Krugman jumps on board the *multiple self-fulfilling equilibrium* view. The moral hazard view is congenial to the classical crisis model's view of crises-the governments had ongoing quasi-deficits because of their implicit guarantees of the banks that would eventually become visible and could not be financed because they were backed by trash projects. He rejects this view because all forms of foreign investment in Asian markets were underway-for example, direct foreign purchases of equity and real estate. Unlike loans to local banks, these were not guaranteed, so moral hazard could not have been a factor for them. Also, he argues-citing the World Bank's *The Road to Recovery* (1998), which reflects Stiglitz's view-that the bulk of the bad loans that materialized resulted from the unforeseen severity of the downturn, and not from ex ante bad lending. He doubts that bank run equilibrium models are valid explanations and cannot make sense of the contagion of 1997-98 without multiple equilibria-i.e. countries are subject to self-validating collapses in confidence caused by events in other countries generating *self-fulfilling pessimism*. A useful model must then produce such *multiple equilibria*. He then builds a model in which a loss of confidence generates a financial collapse. In turn, this generates simultaneously real exchange rate depreciation, balance sheet insolvency for the corporate sector because of its foreign debt, collapse of the banking sector, and validation of the initial pessimism. Absent the pessimism-triggered perhaps by otherwise unrelated problems coming from elsewhere-the good equilibrium could have been maintained. (Paul Krugman, "Balance Sheets, the Transfer Problem, and Financial Crises" January 1999.)



IV. Practical Effects of Changes in the Architecture

With this view, naturally reforms aim at preventing liquidity crisis

The official view is now that the crises of the 1990s were basically liquidity crises that resulted from an interaction between ill-regulated domestic financial institutions and herding- and panic-driven foreign financial institutions. To prevent or mitigate future crises it is therefore natural to aim reforms of the financial and monetary structure at the goal of making lending to emerging market countries longer term, insuring that adequate access to hard currency liquidity is available in a crisis, precluding sudden withdrawals by foreign creditors, and permitting controlled suspension of payments in a crisis, as well as include covenants on credit instruments to achieve an orderly workout. This is the core of the New Architecture discussion, as outlined in the IMF's view described in section II.

In addition, other, less threatening measures such as implementing a better information regime are being proposed. These are changes that everyone can agree with in principal, but will be problematic in practice. Among the facets of a better information regime are improvements in the IMF's SDDS standards that would enhance reporting of a country's foreign exchange position. Better information might also include reporting requirements for hedge fund and investment bank positions to regulators.

Other goals of promoting sound macroeconomic policies, good corporate governance, transparent legal framework, and a robust financial system are a standard litany whose meaning is, in essence, that emerging market countries should become like advanced industrial countries.

Effective implementation is doubtful without strong coercion

The implementation of these goals in emerging market financial systems is doubtful unless strongly coercive measures are put in place, such as making IMF loans or even membership in the IMF conditional on satisfying global standards for the financial sector.

Forget globalization: The goals aim to move global finance back one generation

The core goals pay lip service to supporting the benefits of globalization and to the growth of capital markets fostered by high-technology and sophisticated financial instruments. Nevertheless, their ultimate result, if implemented, would be primarily to shift the global financial system back one generation to a relationship mode of banking:

- They would force the lengthening of commitment to borrowers by fostering FDI and equity investment through attempts to control the nature of capital inflow.
- They would foster a "mature relationship" between international banks and sovereign clients, i.e. a strengthening of relationship lending.
- If the relationship proved not mature enough in a crisis, they would use moral suasion or "bailing in" to force a lengthening of loans, as well as curtail investor rights under an orderly workout procedure without a corresponding increase by investors' ability to attach the economic asset of the debtor countries.
- If this were not enough, they would impose a general suspension of payments under conditions invoked by the IMF to force a restructuring of credits.
- They would discourage short term borrowing by sovereigns.

- They would stifle the market for sovereign bonds by imposing forced restructuring on existing eurobonds and imposing clauses on new issues that would make future restructuring easier. This would tend to undermine the advantage of the bond market and to push lending back on balance sheet.
- More radical proposals from the academic community are to impose general capital controls on outflows.

The decade of bailing in

It has been argued that the private sector should be required to "bail in" to crisis countries to share the burden of losses. Otherwise, the moral hazard problem created by public sector guarantees and credit lines will lead to excessively risky lending and to more severe crises. It has been well recognized that the private sector has suffered major losses in the sequence of crises.

The IFIs follow the earlier Japan model of refusing to admit their own bad loans

How much have the IFIs lost in bearing the burden? The answer is: very little. The World Bank does not admit loan losses. Over its history, the IMF has accumulated a total of SDR2.3 billion in arrears-to Sudan, Somalia, Congo, Afghanistan, Yugoslavia, and Liberia. These cannot be regarded as losses incurred in bailing out the private sector or as well-planned moves in support of the global monetary system but as forced policy loans to marginal sovereignties that, at one time or another were of geo-political importance to the United States. Even the top 10 current borrowers from the fund are dominated by those of strategic interest to the United States. Does anyone out there believe that Fund programs to Russia or Ukraine were based on economic calculation or systemic threats to the world trade or monetary system?

Loans in the Paris Club are mainly the result of bilateral government lending based on poor credit criteria to serve as export subsidies for domestic industries. Rather than book the operation as expenditure for taxpayer perusal, governments prefer to cook the books by calling them loan as if they will be eventually collected.

V. An Alternative View

Crises came from an environment of failed surveillance

Our view of the last three emerging market crises - the Latin American Debt crisis in 1982, the Mexican Tequila crisis in 1994/95 and the most recent Emerging Market crisis in 1997-1999 - is that the global financial surveillance mechanism introduced through an Amendment of the Fund's Articles of Agreement in 1986 has failed. First, the mismanagement of external liabilities, the imbalances in domestic capital structure, the deterioration of domestic credit quality, as well as disequilibria in more conventional macro-economic variables within emerging market countries could have been recognized. Second, if surveillance had been more financial and global in nature, rather than being focused on macroeconomic imbalances and on individual countries, it could have foreseen the cross-border impact that financial disturbances in one country can have on the region or even globally. Third, in those cases where surveillance did identify problems there was and there is no mechanism to induce countries to implement remedial policies in a timely and effective manner.

As Karin Lissakers, U.S. Executive Director of the IMF has said, "The IMF has only recently begun to cover systematically the financial sector and banking supervision in its Article IV reviews. As Asian problems were building, we overlooked weaknesses in bank and corporate balance sheets in much of Asia: the Fund was unaware of the extraordinary leverage of Korean companies, which in some cases reached a ratio of 600/1 debt to equity; we did not focus on the weak accounting



and disclosure practices of banks and non-banks; or the loose loan loss provisioning and generous roll-overs of banks to their key clients." (Karin Lissakers, "The IMF and the Asian Crisis-A View from the Executive Board", at Conference on Asia: An Analysis of Financial Crisis, Co-Sponsored by the Federal Reserve of Chicago and the IMF, October 8, 1998.)

***IMF is currently ill-equipped
to take on a serious financial
sector role***

The main global surveillance agency, the IMF, is not currently organized, staffed, and adequately empowered to undertake effective surveillance to reduce the incidence of global financial crises. With regard to organization, the Fund's surveillance activities remain nationally focused on macroeconomic imbalances, rather than regionally or globally on financial imbalances. The notable exception is the highly successful *World Economic Outlook*, and its *International Capital Markets Report*. The share of the Fund's budget allocated to global financial surveillance is less than 5 percent. With regard to personnel, the Fund remains largely staffed with macroeconomic experts, with little experience in financial markets. Indeed, the Fund's personnel policies make it difficult to recruit such expertise; instead, it is largely homegrown. But given the speed of global financial developments this personnel policy means that the Fund's expertise is inevitably lagging behind market developments. The Fund, as it is currently organized and staffed, is unlikely to recognize a major financial problem sufficiently early to be able to prevent the worst of it.

***It mouths the words but does
not understand globalization***

The analytical inconsistency reflected in the disconnect between the desire to benefit from globalization and the proposed operating goals manifest a serious misunderstanding of what globalization means. This lack of understanding of how the reality of globalization so undermines on-balance sheet, macroeconomic thinking is made evident in the self-contradiction of the proposed goals for emerging markets:

- Lengthen maturities
- Enforce "responsible" behavior (long-termism)
- Lock in lenders in relationship banking
- Attack offshore centers, and yet
- Preserve the benefits of "globalization" and financial engineering methods.

The Fund proposes a set of operating principles that have little survivability in such a world because:

- Globalization, high technology, and sophisticated financial products imply a transaction-base financial system, not a relationship based system.
- Rules that channel capital flows from one balance sheet category to another can be completely undone in a globalized system of sophisticated products.
- Items that can enter an FDI category and thereby avoid taxation can be restructured offshore into short-term lending.
- Items that look like long term loans forced into a reluctant market can be restructured into short-term lending through the domestic banking system, leaving a short term debtor position *vis a vis* the rest of the world.
- The idea that capital flows can be forced artificially into FDI or long term lending while maintaining globalization is laughable: to force this change, draconian controls, taxes, or restrictions on products and cross-border deals must be imposed either directly or through a stringent supervisor.

- Banks will happily provide contingent credit lines to governments for a nice fee and then pull credit away from the consolidated national balance sheet when the lines are drawn in a liquidity crisis. Good luck in tracking this down.

To make matters worse, even if the Fund were to recognize a financial problem its ability to force countries or regions to undertake remedial policy actions is highly limited. It has little ability to strengthen market discipline by making its findings known publicly, nor can it threaten countries credibly with exclusion from its lending resources in the future.

VI. Heal Thyself

What should be done? Instead of adopting solutions that are based on the official doctrine of gross market imperfection, we believe that there are important structural improvements that can be implemented in the IMF to strengthen the architecture of the international financial system.

- First, the IMF has failed in its basic surveillance mandate given to it with the second amendment to the Articles of Agreement in 1978. The evidence is that the Fund did not detect the gathering crises of 1982, 1994/95, or 1997-1999.
- The fundamental problems in these economies and their global interconnections could have been discovered had IMF surveillance been more regional or global in nature rather than remaining country-focused. Such phenomena as the dollar/yen carry trade, the role of Peregrine in the Asian junk bond market come to mind as activities that vigilant global surveillance would have caught.
- IMF surveillance is not sufficiently financial, not sufficiently global, and not sufficiently adversarial, in spite of the lip service currently being paid to the importance of globalization. The institution should be restructured to be dominated by a top-down global view and from a financial perspective. Recall that after the Crash of 1987, it was a revelation when the Brady and SEC reports pointed out that the stock and futures markets were really connected as one and should be viewed as one. Similarly, the crises of 1997-1999 have shown that in a global system liquidity pools are connected as one and should be viewed as one. In such a world, it should be taken as a norm that a disturbance in one country can impact another one, however far away. The characterization of such phenomena as *excessive contagion*—as if all monetary phenomena in financially open economies are not intimately connected—reveals the disturbing, lingering provincialism inherent in the current organizational structure of the IMF.

These shortcomings can be corrected, however. The most immediately effective way to strengthen the international financial architecture, in our view, is to strengthen the role of the IMF in international financial surveillance.

More control should be given to a top-down global financial view and taken away from a bottom-up macroeconomic view

First, the institution needs to refocus its surveillance activities regionally and globally. Within the institution, the ultimate responsibility for surveillance should be lodged in global surveillance departments, rather than regional area departments. The current incentive structure is such that area departments become captive of their constituent countries. In their surveillance role, area departments will generally be reluctant to criticize important, combative countries, especially in areas where judgements are inherently qualitative such as in the quality of risk control systems in the financial sector. If the Fund were to have a role as referee in calling for a



***Reduce the "capture"
problem***

payments moratorium, this might be biased by the 'department capture' problem. This is a problem of the culture of the institution-while people in the financial markets who consistently get the calls wrong in financial markets lose their jobs without compunction, this is not the case in the IMF. Thus, 'getting it right' is not the primary goal of senior department management responsible for surveillance.

***Get some more expertise in
financial markets***

Second, the Fund needs to change its personnel policies to be able to acquire staff with the requisite financial expertise into senior management positions.

Third, ways need to be found to empower the Fund to achieve a timely implementation of its remedial policy recommendation. The release of its surveillance findings to the public on a timely basis is essential in this regard. However, more drastic measures, such as excluding the country from membership will have to be considered.

If the IMF is to adopt a role as a *de facto* global central bank-and the contingent credit facility is a tentative step in that direction-it must have central bank-like powers. These include not only surveillance but also enforcement powers. Right now the IMF lacks sufficiently strong mandates and instruments to induce countries to undertake remedial policies.

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